

**Amendments to the Drawings:**

The attached sheets of drawings includes changes to Figures 1-8. These sheets, which include Figures 1-8, replace the original sheets including Figures 1-8.

Appendix A: Replacement Sheets

## REMARKS

Upon entry of this amendment, independent claim 1 with dependent claims 2-7, independent claim 8, and independent claim 9 will be present in the application.

Claims 8 and 9 are claims 3 and 7 written in independent form, with the exception that neither claim recites a range of 1 to 5 m/sec for the overflow speed. Accordingly, neither claim introduces new matter.

The drawings were objected to on the basis that the labels for Figures 1-8 were too poor. The Applicant respectfully submits that the drawings are at least "informal" quality and are therefore suitable for use during prosecution of the subject application. To facilitate examination of the subject application, drawings having new labels are submitted herewith.

Claims 1, 2 and 4-6 were rejected under 35 U.S.C. § 103 as being unpatentable over Patent Abstracts of Japan, Vol. 18, No. 575, C-1268 (1994) corresponding to Japanese Patent No. 6-210295 in view of the description of such patent on page 2, lines 5-13, of the specification, the Office Action contending that "claim 1 essentially differs from the method of JP '295 in reciting the step of creating overflow speeds at the membrane surfaces in the range of 1 to 5 m/s." The Office action cited the subject specification for stating that JP '295 discloses a circumferential speed of 2.2 m/s and that this "would cause overflow speeds in the range of approximately 1 m/s for the mentioned operating mode and overlapping." The Office Action further contended that JP '295 teaches that "water is filtered in a condition that the polarization of density is restricted as a rapid current and a turbulence generate on the surface of a membrane" and that it would have been obvious "to increase the overflow speeds greater than 1 m/s to generate rapider [sic] current and greater turbulence on the surface of the membrane to further restrict the polarization of density as water is filtered."

JP '295 discloses that a flocculating agent and a pH adjusting agent are directly injected into the water to be treated 22 in the filtration tank 10. The water 22, the flocculating agent 24 and the pH adjusting agent 27 are mixed by a gyrating current generated by rotation of the filtration member 34 to form a floc. At the same time, the water 22 is filtered in a condition that the polarization of density is restricted as a rapid current and a turbulence generate on the surface of a membrane. Thus, this flocculation/filtration device does no longer require a flocculation tank, a circulation tank and a circulation pump, so that the device can be made compact and save operating power.

In other words, the filtration member of JP '295 rotates to create a sufficient "gyrating current" to mix the water, flocculating agent and pH adjusting agent and a

sufficient "rapid current" and a sufficient "turbulence on the surface of a membrane" to restrict polarization of density" in such mixture. However, it cannot logically be argued that it would have been obvious to increase the overflow speeds of the JP '295 apparatus greater than the overflow speeds utilized in such patent given the fact that the agitation caused by indiscriminately increasing "gyrating current", "rapid current" and "turbulence on the surface of a membrane" would destroy the flocs required for the proper operation of the apparatus.

"It is insufficient that the prior art disclosed the components of the patented device, either separately or used in other combinations; there must be some teaching, suggestion, or incentive to make the combination made by the inventor." Northern Telecom Inc. v. Datapoint Corp., 15 USPQ2d 1321, 1323 (Fed. Cir. 1990). "There must be something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination." Interconnect Planning Corp. v. Feil, 227 USPQ 543, 551 (Fed. Cir. 1985). There is simply nothing in the disclosure of JP '295 that provides the required teaching, suggestion or incentive to increase the overflow speed of the apparatus disclosed therein to greater than 1 m/s since to do so could result in the destruction of the flocs. In addition, the courts have consistently held that "whether a particular combination might be obvious to try is not a legitimate test of patentability." In re Fine, 5 USPQ2d 1596, 1599 (Fed. Cir. 1988), see also In re Dow Chemical, 5 USPQ2d 1529 (Fed. Cir. 1988), In re O'Farrell, 7 USPQ2d 1673 (Fed. Cir. 1988), In re Geiger, 2 USPQ2d 1276 (Fed. Cir. 1987) and In re Goodwin, 198 USPQ 1 (C.C.P.A. 1978). "There must be a reason or suggestion in the art for selecting the procedure used, other than the knowledge learned from the applicant's disclosure." In re Dow Chemical, at 1532. The only document of record providing a suggestion for increasing the overflow speed to greater than 1 m/s is the subject application.

MPEP § 706.02(j) states "[t]o establish a *prima facie* case of obviousness, three basic criteria must be met. ... the prior art reference (or references when combined) must teach or suggest all the claim limitations." See also MPEP §§ 2142 and 2143. Since the Office Action does not establish a *prima facie* case of obviousness, the rejection under 35 U.S.C. § 103 must be withdrawn.

The various dependent claims add additional features to the independent claims, and are therefore believed to be allowable. Also, the dependent claims are believed patentably distinct on their own merits as being directed to combinations not suggested by the references.


For example, claim 4 recites that each of the membrane discs have different rotational speeds. The Office Action alleges that it would have been obvious "to provide membrane discs (34) having different rotational speeds so long as these rotational speeds generates [sic] gyrating current to mix flocculating agent and pH adjusting agent" simply because JP '295 shows separate motors for the two filtration

members 33. However, the test for obviousness requires that "there must be some teaching, suggestion, or incentive to make the combination made by the inventor". See Northern Telecom Inc. and Interconnect Planning Corp.. The fact that JP '295 shows two motors does not suggest that the apparatus should include two separate controllers and that the filtration members should be operated at different rotational speeds. Given the fact that redundant control systems would increase the cost of the JP '295 apparatus, it cannot logically be argued that it would have been obvious to include such apparatus or to operate the filtration members at different rotational speeds unless there was a specific advantage to do so. The Office Action does not even suggest what advantage may be derived by operating the filtration members of JP '295 at different rotational speeds. The Office Action merely alleges that JP '295 could be modified such that the filtration members operated at different rotational speeds. Since the Office Action does not establish a *prima facie* case of obviousness, the rejection under 35 U.S.C. § 103 must be withdrawn.

The Office Action stated that claims 3 and 7 included patentable subject matter. Claims 8 and 9 are claims 3 and 7 written in independent form, with the exception that neither claim recites a range of 1 to 5 m/sec for the overflow speed. The applicant respectfully submits that omitting the range for the overflow speed does not impact the patentability of claims 8 and 9 since the Office Action alleged that this range did not render claim 1 patentable. In addition, the range is not required for antecedent basis in either claim.

In view of the above-directed amendments and the proceeding remarks, prompt and favorable reconsideration is respectfully requested.

Respectfully submitted,  
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